

### **REMARKS/ARGUMENTS**

Claims 1-20 are pending in this application. No claims have been amended, added, or cancelled with the filing of this response. Reconsideration of the application is respectfully requested in view of the following remarks.

#### **Claim Rejection under 35 U.S.C. § 112**

The rejection of claims 1-20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is traversed.

According to the Office, “[c]laims 1-7 and 13-20 are indefinite for claiming the product which is ‘obtainable’ by the recited clam steps,” and the “undue experimentation is involved to determine boundaries of protection.” (*See* Office Action at page 2). However, Applicants respectfully point that the claims meet the requirements of 35 U.S.C. § 112, *first* paragraph, since one skilled in the art would be enabled to make and use the claimed polymer foam, as defined by the claim and recited in the specification. In particular, as recited in the claims and described throughout the specification, including working examples, the first (curing) and second (drying) parameters are the claims provide sufficient information to allow one to practice the claimed invention. (*See* MPEP 2164.01(a), explaining the factual considerations of *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988)).

According to the Office, “[i]t is not clear what kind [of] resins are encompassed by ‘polycondensation-reactive.’” (*See* Office Action at page 2). However, Applicants point out that the phrase is clearly defined in the claims and specification. (*See* MPEP 2173.02, explaining that definiteness of claim language must be analyzed, not in a vacuum, but [*inter alia*] in light of claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made). Present claim 2 recites the polycondensation-reactive resin as an “amino resin,” and present claim 3 further defines the specific types of amino resins. (*See* also present specification at page 2, lines 35-41). As one skilled in the art would understand these terms, the claim language should be considered definite.

According to the Office, there is not enough antecedent bases for “the solution” in stage c in claim 8. (*See* Office Action at page 3). However, Applicants point out that stage c recites that “the solution” refers to “the polycondensation-reactive resin from stage a).” Moreover, as one skilled in the art would understand, the *resin* is in a solution form, and that a structure (polymer foam) is not formed until stage d) of the process.

Therefore, in view of the above reasons, reconsideration and withdrawal of the rejections is requested.

**Claim Rejections under 35 U.S.C. § 102(b)/ § 103(a)**

The rejection of claims 1-7 and 13-20 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over WO 02/26871 (US Patent No. 6,800,666 to Hahnle et al.) or U.S. Patent No. 4,540,717 to Mahnke et al.; and the rejection of claims 1-3, 5-7, 13-17, 19 and 20 as anticipated by or, in the alternative, as obvious over U.S. Patent No. 4,666,948 to Woerner et al. are traversed.

Regarding anticipation, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the . . . claim.” *Id.* (citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)).

Regarding obviousness, as the Board of Patent Appeal and Interferences has recently confirmed, the analysis requires that the Office make “a searching comparison of the claimed invention - *including all its limitations* - with the teaching of the prior art.” *See In re Ward and Murphy*, Appeal No. 2007-3733, citing *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis in original); *see also Ex parte Martin Haubner and Rolf Pinkos*, Appeal No. 2009-0449 (reversing an obviousness rejection and explaining that “in rejecting *process* claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a case of prima facie obviousness”). Moreover, the Supreme Court has indicated, *inter alia*, that “there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” and a “reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR Int'l v. Teleflex*

*Inc.*, 127 S. Ct. 1727, 1731, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); see also *Takeda Chem. Indus., v. Alphapharm Pty. Ltd.*, 492 F.3d 1350, 1356-57 (Fed. Cir. 2007) (quoting *KSR*, 127 S. Ct. at 1731).

In the present case, Applicants point out that when the components and features of the present claims are compared to the disclosures of the references of record, it is evident that the claimed process and composition differs from Hahnle et al., Mahnke et al., Woerner et al., and there is no apparent reason that would have prompted a person of ordinary skill to combine the elements or modify the reference in the manner presently claimed.

In particular, as acknowledged and appreciated by the Office, all of the above references do not describe “the cell size of the resulting foams.” In particular, there is no showing of a specific process that the provides “ a *nanoporous* polymer foam, obtainable by a process comprising curing microemulsions which comprise at least one aqueous polycondensation-reactive resin, at least one oil component and at least one amphiphile, and subsequently drying.” In the present invention, the nanoporous polymer foams have extremely small pores and high total porosity. In addition, the process enables drying of the polymer gel with low energy consumption and high space-time yields.

By contrast, Woerner merely describes foams based on melamine resins prepared by foaming aqueous solutions. (See examples, columns 2-3). Regarding Mahnke et al., the reference merely describes foam, based on a melamine-formaldehyde condensate, with an open cell character with branched webs. (See col. 3, lines 22-42). Regarding Hahnle et al., the reference describes a process for preparing hydrophilic open-celled resilient foams, which comprises, *inter alia*, heating an aqueous solution, in which foam structure is described as a multiplicity of interconnected, three-dimensionally branched webs. (See col. 2, line 25 to col. 3, line 41).

Therefore, in view of the above apparent differences, the process of claim 1 and the claims dependent therefrom are novel and unobvious over the cited documents of record. Accordingly, reconsideration and withdrawal of the rejection is requested.

**Claim Rejections under 35 U.S.C. § 103(a)**

The rejection of claims 1-9 and 11-12 under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 4,666,948 to Woerner et al.; and the rejection of claims 8-12 as obvious over either one of WO 02/26871 or US Patent 4,666,948 to Woerner et al., or US Patent 4,540,717 to Mahnke et al. are respectfully traversed for the reasons and deficiencies indicated above regarding these references.

Therefore, the process of claim 1 and the claims dependent therefrom are novel and unobvious over the cited documents of record. Accordingly, reconsideration and withdrawal of the rejection is requested.

In view of the above amendments and remarks, Applicants believe the pending application is in condition for allowance. Consideration and indication of the same are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

If additional fees are due with the filing of this response, please charge our Deposit Account No. 03-2775, under Order No. 12810-00250-US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

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